



SEQUENCE LISTING

<110> Pastan, Ira
Chowdhury, Partha S.
The Government of the United States of America
as represented by the Secretary of the
Department of Health and Human Services

<120> Immunoconjugates Having High Binding Affinity

<130> 015280-395100US

<140> US 09/979,539
<141> 2001-11-20

<150> US 60/160,071
<151> 1999-05-27

<150> WO PCT/US00/14829
<151> 2000-05-26

<160> 12

<170> PatentIn Ver. 2.1

<210> 1
<211> 241
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:SS single chain
Fv antibody (SS scFv)

<400> 1
Met Gln Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Glu Lys Pro Gly
1 5 10 15
Ala Ser Val Lys Leu Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Gly
20 25 30
Tyr Thr Met Asn Trp Val Lys Gln Ser His Gly Lys Ser Leu Glu Trp
35 40 45
Ile Gly Leu Ile Thr Pro Tyr Asn Gly Ala Ser Ser Tyr Asn Gln Lys
50 55 60
Phe Arg Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser Thr Ala
65 70 75 80
Tyr Met Asp Leu Leu Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Phe
85 90 95
Cys Ala Arg Gly Gly Tyr Asp Gly Arg Gly Phe Asp Tyr Trp Gly Gln
100 105 110
Gly Thr Thr Val Thr Val Ser Ser Gly Val Gly Gly Ser Gly Gly Gly
115 120 125
Gly Ser Gly Gly Gly Gly Ser Asp Ile Glu Leu Thr Gln Ser Pro Ala
130 135 140

Ile Met Ser Ala Ser Pro Gly Glu Lys Val Thr Met Thr Cys Ser Ala
145 150 155 160

Ser Ser Ser Val Ser Tyr Met His Trp Tyr Gln Gln Lys Ser Gly Thr
165 170 175

Ser Pro Lys Arg Trp Ile Tyr Asp Thr Ser Lys Leu Ala Ser Gly Val
180 185 190

Pro Gly Arg Phe Ser Gly Ser Gly Ser Gly Asn Ser Tyr Ser Leu Thr
195 200 205

Ile Ser Ser Val Glu Ala Glu Asp Asp Ala Thr Tyr Tyr Cys Gln Gln
210 215 220

Trp Ser Gly Tyr Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Ile
225 230 235 240

Lys

<210> 2
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:linker peptide

<400> 2
Gly Val Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10 15

<210> 3
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:nucleotide
sequence encoding amino acids in CDR3 of the
variable light chain (V-L) of SS scFv

<400> 3
cagcagtgga gtggttaccc tctcacg

27

<210> 4
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:amino acid
sequence of CDR3 of the variable light chain (V-L)
of SS scFv

<400> 4
Gln Gln Trp Ser Gly Tyr Pro Leu Thr
1 5

<210> 5
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:peptide linker

<400> 5
Gly Gly Gly Ser
1

<210> 6
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:sequence
addition at carboxyl terminus to maintain ability
to translocate into the cytosol

<400> 6
Lys Asp Glu Leu
1

<210> 7
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:sequence
addition at carboxyl terminus to maintain ability
to translocate into the cytosol

<400> 7
Arg Glu Asp Leu
1

<210> 8
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:PE38 C-terminal
native sequence residues 609-613

<400> 8
Arg Glu Asp Leu Lys
1 5

<210> 9
<211> 50
<212> DNA
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:degenerate
 oligo SS VL 89/93/94

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 <222> (1)..(50)
 <223> n = g, a, c or t

 <400> 9
 gcaccgaacg tgagaggsnn snnactccac tgsnngcagt aataagttgc 50

 <210> 10
 <211> 46
 <212> DNA
 <213> Artificial Sequence

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 oligo SS VL Mut 92-94

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 <222> (1)..(46)
 <223> n = g, a, c or t

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 <210> 11
 <211> 50
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:degenerate
 oligo SS VL Mut 89-91

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 <221> modified_base
 <222> (1)..(50)
 <223> n = g, a, c or t

 <400> 11
 gcaccgaacg tgagagggta accactsnns nnsnngcagt aataagttgc 50

 <210> 12
 <211> 47
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:degenerate
 oligo SS VL Mut 95-97

<220>

<221> modified_base

<222> (1)..(47)

<223> n = g, a, c or t

<400> 12

ctttgtccca gcaccgaasn nsnnnsngta accactccac tgctgcg

47

FOOT" 6E56Z660